

CLAIMS

1. – 58. (Canceled)

59. (Currently Amended) A dual mode transceiver comprising:

a linear modulation receiver adapted to receive linearly modulated TDMA signals from a first remote station over a first TDMA downlink channel having a given bandwidth, said linear modulation receiver being operative to receive constant envelope modulated TDMA signals from a second remote station over a second TDMA downlink channel having the same given channel bandwidth, wherein the constant envelope TDMA signals are an approximation of said linearly modulated TDMA signals, and wherein the first and second TDMA downlink channels have time slots of equal duration and include the same number of bits; and

a transmitter that transmits constant envelope modulated TDMA signals over an uplink channel to said first and second remote stations.

60. (Previously Presented) The dual mode transceiver of claim 59 wherein said first remote station is a satellite relay station.

61. (Previously Presented) The dual mode transceiver of claim 60 wherein said second remote station is a terrestrial base station.

62. (Currently Amended) The dual mode transceiver of claim 59 wherein said constant envelope modulated TDMA signals are Gaussian Minimum Shift Keyed (GMSK) modulated signals.

63. (Currently Amended) The dual mode transceiver of claim 59 wherein said linearly modulated TDMA signals are Offset Quadrature Phase Shift Keying (OQPSK) signals.

64-65. (Cancelled).

66. (Currently Amended) The dual mode transceiver of claim 65 59 wherein the frame period of the first TDMA downlink channel is longer than the period of the second TDMA downlink channel.

67. (Currently Amended) The dual mode transceiver of claim 66 wherein the linearly modulated TDMA signals are received in periodic time slots with a first spacing, and wherein said constant envelope modulated TDMA signals are received in periodic time slots with a second spacing less than said first spacing such that the average bit rate of the linearly modulated TDMA signals is less than the average bit rate of the constant envelope modulated TDMA signals.

68. (Currently Amended) A method of transmitting and receiving signals at a dual mode transceiver:

receiving linearly modulated TDMA signals from a first remote station over a first TDMA downlink channel having a given bandwidth with a linear modulation receiver configured to receive linearly modulated TDMA signals;

receiving constant envelope modulated TDMA signals from a second remote station over a second TDMA downlink channel having the same given bandwidth with said linear modulation receiver, wherein the constant envelope TDMA signals are an approximation of said linearly modulated TDMA signals, and wherein the first and second TDMA downlink channels have time slots of equal duration and include the same number of bits; and

transmitting constant envelope modulated TDMA signals to the first and second remote stations.

69. (Previously Presented) The method of claim 68 wherein said first remote station is a satellite relay station.

70. (Previously Presented) The method of claim 69 wherein said second remote station is a terrestrial base station.

71. (Currently Amended) The method of claim 68 wherein said constant envelope modulated TDMA signals are Gaussian Minimum Shift Keyed (GMSK) modulated signals.

72. (Currently Amended) The method of claim 68 wherein said linearly modulated TDMA signals are Offset Quadrature Phase Shift Keying (OQPSK) signals.

73-74. (Cancelled).

75. (Currently Amended) The method of claim 74-68 wherein the frame period of the first TDMA downlink channel is longer than the period of the second TDMA downlink channel.

76. (Currently Amended) The method of claim 75 wherein the linearly modulated TDMA signals are received in periodic time slots with a first spacing, and wherein said constant envelope modulated TDMA signals are received in periodic time slots with a second spacing less than said first spacing such that the average bit rate of the linearly modulated TDMA signals is less than the average bit rate of the constant envelope modulated TDMA signals.